

**AN ADDITIVE FOR INCREASING THE DENSITY OF AN OIL-BASED FLUID
AND FLUID COMPRISING SUCH ADDITIVE**

ABSTRACT

A wellbore fluid having an oleaginous phase and an additive for increasing the density of the wellbore fluid. The additive comprises solid colloidal particles coated with a dispersant coated onto the colloidal particle during the comminution process of forming the particles. Exemplary starting materials for the colloidal particles include commonly known weighting agents including barite, calcium carbonate, dolomite, ilmenite, hematite or other iron ores, olivine, siderite, and strontium sulfate as well as mixture and combinations of these and other similar weighting materials. The dispersant in one illustrative embodiment, is selected from carboxylic acids of molecular weight of at least 150 Daltons. Alternatively, the dispersant coating may be made of compounds including oleic acid, polybasic fatty acids, alkylbenzene sulfonic acids, alkane sulfonic acids, linear alpha-olefin sulfonic acid or the alkaline earth metal salts of any of the above acids, and phospholipids as well as mixtures and combinations of these compounds. In another illustrative embodiment the dispersant is a polyacrylate ester. The illustrative polymeric dispersant should have an average molecular weight from about 10,000 Daltons to about 200,000 Daltons.